

INSTRUCTION MANUAL
Adjustable Regulated DC Power Supply

Statement: The company reserves the right to improve & upgrade products, product specifications and design are subject to change without notice.

OPERATION INSTRUCTION

English

Made in China

Thank you for purchasing this product. Please read the manual carefully before operating and keep this manual for future reference.

● This product should not be thrown in the garbage. In accordance with the European directive 2012/19/EU, electronic equipment at the end of their life must be collected & returned to an authorized recycling facility. ● Este producto no debe desecharse en la basura. De acuerdo a la directiva europea 2012/19/EU, los equipos electrónicos al final de su vida se deberán recoger y trasladar a una planta de reciclaje autorizada. ● Dieses Produkt sollte nicht mit dem Hausmüll entsorgt werden. In Übereinstimmung mit der europäischen Richtlinie 2012/19/EU müssen elektronische Geräte am Ende ihrer Lebensdauer eingesammelt und einem autorisierten Recyclingbetrieb zugeführt werden.

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IMPORTANT SAFETY GUIDELINES

Strictly follow the basic safety guidelines and precautions when using the product. The guidelines include:

CAUTION!!! WARNING!!!

Read the operating manual thoroughly before use.

1. To prevent the danger of electric shocks, the product MUST be connected to the electrical outlet correctly.
2. DO NOT immerse the product in water.
3. Beware the danger of electric shock. To prevent electric shock, DISCONNECT the power plug when the product is not in use.
4. This product is meant for indoor and home use ONLY.
5. To prevent electric shock, DISCONNECT the power plug when replacing the fuse or conducting other repairs.
6. Fuses of the same type and rated specification MUST be used for replacement.
7. This product is not meant for users that are inexperienced (including children), have physical, sensory, or mental disabilities unless these users are guided and monitored by their responsible guardians. Take good care of the children and DO NOT allow children to play with this product.
8. Manage the children, and ensure that they DO NOT play with this product.
9. To prevent the risk of danger, ONLY the manufacturer, manufacturer-appointed service provider, or certified professionals are allowed to replace the power cord if the power cord is damaged.
10. ANY repair services shall ONLY be conducted by the manufacturer-appointed service provider. This product does not include spare parts for users to conduct self-repairs.
11. To reduce the risk of fire hazard or electric shock, keep the product indoor and DO NOT expose this product in the rain or humid environments. Read the instruction manual before use.
12. To ensure your safety, TURN OFF the power switch when the operation is complete. DISCONNECT the power cord if the product is not in use for an extended period.
13. The product includes a detachable short power cord to reduce the risk of cable tangling or tripping.
14. A longer detachable power cord is available, use the power cord with utmost caution.
15. When using the long detachable power cord:
 - 1) The electrical ratings on the detachable power cord or extension cord MUST BE identical to the electrical ratings of this product.
 - 2) The extension cord should be a grounding three-prong power cord.
 - 3) Organize the longer power cord well. Ensure the power cord is on the surface of the table or work desk to avoid tripping, obstructing, or accidental pulling (especially for children).
16. Reserve sufficient space around the power supply to allow heat dissipation and cooling.
17. DO NOT use the product in environments where the ambient temperature is over 40°C.

SAVE THESE INSTRUCTIONS

I. SPECIFICATIONS

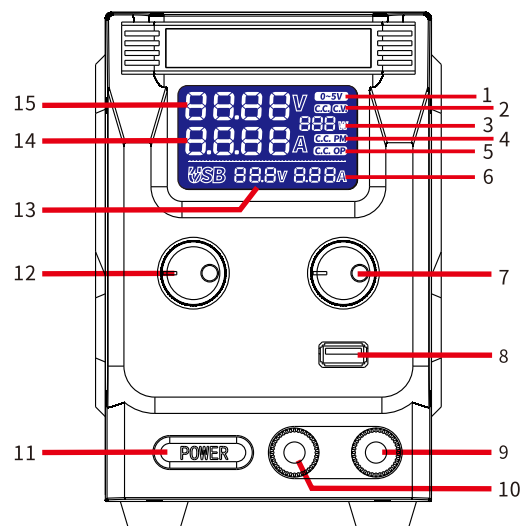
Model Number	1505D IV	3005D IV	3010D IV
Rated Power	120W	220W	400W
Main Unit Dimensions	L200*W98*H154mm ±5mm		
Operating Ambient Temperature	-10℃~40℃ /14°F~104°F		
Relative Humidity	<90%		
Output Voltage Range	DC 0~5V/0~15V	DC 0~5V/0~30V	
Output Power	75W	150W	300W
Voltage Precision	<0.1%+0.01V		
Current Precision	<0.2% +5mA		
Load Regulation	<0.2% +3mV	<0.5% +3mV	
Ripple & Noise	Vrms<0.2%(10Hz-1MHz)		
Current Protection	0~5A		0~10A
Output Voltage (USB)	DC 5V/9V/12V ±0.2V		
Output Power (USB)	20W		
Voltage Precision (USB)	0.1V		
Current Precision (USB)	0.4% +10mA		
Current Protection (USB)	4A/2.5A/2A		

I. APPLICATIONS & FEATURES

This adjustable regulated DC power supply is specially designed for scientific research, product development, lab testing, higher education practical applications, assembly line, and electronic repair.

1. It is compact, lightweight, portable, and easy to transport.
2. The power supply is highly efficient with a high power capacity and relatively low noise.
3. The power supply can produce highly stable regulated voltage with low ripple, and it has sophisticated Short-Circuit Protection, Overcurrent Protection and Overheating Protection features.
4. The power supply supports fast charging quick-charge protocols QC 2.0 and QC3.0, and it provides fast charging quick-charge via a USB port, allowing mobile phones to be charged faster.
5. The power supply's LED display is uniquely designed with a classic look and aesthetic appeal.
6. The power supply is designed with Overcurrent Protection and Constant Current Output Mode, which allowing allows for a wider broader loading range of applicable loads.

II. CONTROL PANEL



1. Output Voltage Range Indicator (0-5V)
2. C. C. Mode Indicator (Constant Current)
3. C. V. Mode Indicator (Constant Voltage)
4. Output Power
5. Overcurrent Cut-Off Protection
6. Current Reading (USB Port)
7. Voltage Adjustment Knob
8. USB Port
9. Output Terminal (Negative -)
10. Output Terminal (Positive +)
11. Power Button
12. Current Adjustment Knob
13. Voltage Reading (USB)
14. Output Current
15. Output Voltage

III. OPERATIONS

1. Connect the power supply to an electrical outlet.
2. Turn ON the power switch and set the desired output voltage.
3. Connect the power supply to the load's load correctly to the positive terminal and negative terminal correctly, and the power supply will begin powering normally.
4. Once the operation is complete, disconnect the load, and turn OFF the power supply's power switch. DISCONNECT the power cord when not in use for an extended period.

5. Voltage Adjustment.

Press the voltage adjustment knob to move the cursor from the first digit to the right. Press once more to move to the next digit from the left. Turn the voltage adjustment knob to set the voltage value. The voltage adjustment is precise to 0.01V per increment/decrement.

6. Current Adjustment.

Press the current adjustment knob to move the cursor to the first digit to the right. Press once more to move to the next digit on the left. Turn the current adjustment knob to set the current value. The current adjustment is precise to 1mA per increment/decrement.

7. Constant Voltage/Constant Current

The power supply's key function is referred to as "automatic C.C. and C.V. switching". The power supply can switch between C.V. mode and C.C. mode automatically based on the load change connected to the power supply. We refer to the change between modes as the point of change.

How it works: If the load puts the DC power supply in C.V. (Constant Voltage) Mode, then the power supply will output stabilized voltage (with the C.V. indicator ON). As the load increases, the output voltage will remain stabilized until it reaches the preset current. At this point, the output current will remain stabilized (with the C.C. indicator ON). As the load increases the output voltage will decrease in ratio to the increase. Vice versa, the change from C.C. (Constant Current) mode to C.V. (Constant Voltage) mode occurs as the load decreases.

8. Overcurrent Cut-Off Protection and Constant Current Protection.

Press and hold the Current Adjustment Knob for approximately 1 second to switch between the Overcurrent Cut-Off Protection mode and Constant Current Protection mode.

9. Output voltage ranges setting.

Press and hold the voltage adjustment knob for approximately 1 second to switch between the different output voltage modes.

IV. MAINTENANCE & PRECAUTIONS

1. When charging the battery, DO NOT connect the positive and negative terminals incorrectly.
2. The unit can be used for minimum duration of 4 hours under full capacity. If a longer duration of use is required, keep the usage capacity within 80%. Failure to do so may result in the premature failure of the power supply. Account for additional current capacity when ordering this unit.
3. If the temperature of the power supply's cooling system exceeds the regulated temperature, the power supply will stop outputting direct current and the display will show "OVER". Once the cooling system's temperature cools to the normal temperature, the power supply will resume outputting direct current.